

Remarks

Applicants thank the Examiner for his careful review of the application.

Applicants note that claims 19-34 have been allowed, and thank the Examiner.

Applicants note that claims 8, 12, and 13 have been identified as being allowable, but for their dependence from a rejected base claim. Applicants thank the Examiner.

Allowability of Independent Claim 1

Independent claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent Number 5,710,979 ("Tamai"). Applicants respectfully traverse this rejection.

The present application discloses a scheme for identifying nonfunctional two-way radios. For example, a quick service restaurant may employ many two-way radios to facilitate communication throughout the restaurant and drive-through lane. Per such a scenario, a particular two-way radio may simply be set aside when it becomes nonfunctional (e.g., a two-way radio exhausts its battery). Eventually, as additional radios are set aside, the quick service restaurant is without sufficient radios to operate properly. The present application provides a scheme by which nonfunctional radios may be identified, so that they are not simply set aside, until so many radios are set aside that the restaurant cannot operate properly.

Claim 1 reads as follows:

1. A method of identifying nonfunctional two-way radios from among a known group of two-way radios expected to be operating within a region, the method comprising:

for each of the two-way radios expected to be operating within the region, establishing a corresponding window of time;

for each of the established windows of time, awaiting a transmission from the corresponding radio;

if, for a particular radio, no transmission is detected within its corresponding window of time, recording the absence of the transmission; and

if, for a particular radio, the number of times absence of transmission has been recorded exceeds a threshold, identifying the particular radio as nonfunctional.

As can be seen, claim 1 requires that, for each radio within a region, a window of time be established during which a transmission from a particular radio is awaited. If no transmission is received, the absence of the transmission is recorded. If the number of times absence of transmission has been recorded exceeds a threshold (e.g., six times), the particular radio is identified as nonfunctional.

In a setting such as a quick service restaurant, a particular radio may be turned off at any point in time, due to the fact that the particular is not being used by an employee. Thus, that no transmission is received from a radio during a given window of time is not necessarily indicative of the fact that the radio is nonfunctional—the radio may simply be turned off. To account for this fact, claim 1 requires that a radio be identified as nonfunctional only if "the number of times absence of transmission has been recorded exceeds a threshold." Tamai does not teach such a threshold.

According to Tamai, a radio is identified as "not in normal operation" if even a single expected transmission is not received. This teaching plainly contradicts the limitation of claim 1 that a radio be identified as nonfunctional only if "the number of times absence of transmission has been recorded exceeds a threshold."

The Office Action points to column 6, lines 55-59 as teaching the use of a threshold for identifying a radio as nonfunctional. This is incorrect. The "threshold" referred to therein is a value equal to the number of radios in an area. The Tamai threshold is employed in a loop (see FIG. 3, reference numeral T6), in which a single pass through the loop corresponds to a test of a single radio. The loop is traversed as many times as there are radios in a region. A comparison between a counter variable and the threshold is used as an exit condition for the loop. Comparison to the Tamai threshold is for the purpose of making sure that each radio in an area has been tested—not for determining whether a particular radio has failed to transmit so many times that it may be inferred that a radio is nonfunctional.

Thus, in short, Tamai does not teach identifying a radio as nonfunctional only if "the number of times absence of transmission has been recorded exceeds a threshold." Further, Tamai fails to even suggest such a limitation. For these reasons, Tamai cannot serve as a proper basis for a rejection of independent claim 1 under 35 U.S.C. § 102(b).

Allowability of Claims 2-7 and 9-11

Claims 2-7 and 9-11 each depend from claim 1. The rejections of these claims share a common premise: that claim 1 is anticipated by Tamai. As discussed above, this premise is false, and the rejection of these claims should be withdrawn. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of these claims.

Allowability of Independent Claim 14

Independent claim 14 was rejected under 35 U.S.C. §102(e) as being anticipated by published application US 2002/0137466 ("Bamburak"). Applicants respectfully traverse this rejection.

Independent claim 14 recites a radio that is programmed to emit, at a designated point in time, a transmission containing a code identifying the radio. Prior to the broadcast of the transmission containing the identification code, a transmission protocol governing subsequent transmissions is known by the radio.

Bamburak teaches a method for selecting a wireless communications provider in a region having multiple wireless providers. The passages identified by the Office Action as disclosing the concept of emitting a transmission containing a code identifying the radio relate to the process by which a cellular telephone registers with a service provider upon power-up. Importantly, at the point in time that a cellular telephone is registering with a service provider, it does not know the transmission protocol governing subsequent transmissions. For example, if the cellular network is TDMA, the cellular telephone does not know what time slot it will be assigned. If the cellular network is CDMA, it does not know what spreading code it will be assigned. Thus, the requirement that "prior to the broadcast of the transmission containing the identification code, a transmission protocol governing subsequent transmissions is known by the radio" excludes transmissions in which a radio is registering with a service provider.

In short, claim 14 requires that "prior to the broadcast of the transmission containing the identification code, a transmission protocol governing subsequent transmissions is known by the radio." Bumburak does not disclose or even suggest this feature. Instead, Bumburak teaches a scheme by which a radio emits a transmission

identifying itself, but the radio does not know the protocol governing subsequent transmissions at the time the transmission is made. Thus, Bumburak cannot properly serve as a basis for a rejection of independent claim 14 under 35 U.S.C. §102(e). For this reason, Applicants respectfully request reconsideration and withdrawal of the rejecting of independent claim 14.

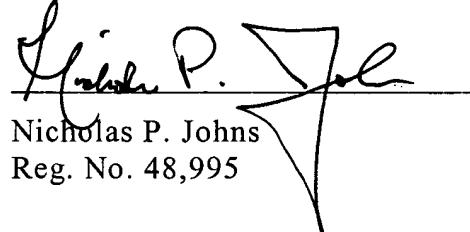
Allowability of Claims 15-18

Claims 15-18 each depend from claim 14. The rejections of these claims share a common premise: that claim 14 is anticipated by Bumburak. As discussed above, this premise is false, and the rejection of these claims should be withdrawn. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of these claims.

Conclusion

Claims 1-34 remain pending in the application (claims 19-34 have been allowed). These claims are believed to be allowable for the reasons set forth above. This amendment is believed to be responsive to all points raised in the Office Action. Accordingly, Applicants respectfully request prompt reconsideration, allowance, and passage of the application to issue. Should the Examiner have any remaining questions or concerns, the Examiner is urged to contact the undersigned by telephone at the number below to expeditiously resolve such concerns.

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